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I. INTRODUCTION

Waymo began this case with broad accusations about the alleged theft of 14,000 files. But as the Court has now seen, Waymo is reduced to peddling rumors and innuendo about a conspiracy, while ignoring the undisputed differences between its LiDAR and Uber's design:



(9/6/17 Sealed Hr'g Tr. at 77:17-25.) Because of these fundamental differences between Uber's and Waymo's designs, TS 96 should not go to the jury. Waymo presents no evidence that the GBr3 files were in Uber's possession or were used by anyone to design the Fuji boards. The undisputed differences in the GBr3 and Fuji boards affirm that no such misappropriation occurred. The analysis of Waymo's own expert, Dr. Hesselink, confirms that Uber does not use the specific implementation of Waymo's GBr3 Dr. Hesselink's calculations and illustrations show that the diode positioning does not match up, even when the differing focal lengths are factored out. Dr. Hesselink also acknowledges that the diode positioning is driven by the beam spacing, which he admits is completely different. Accordingly, summary judgment in favor of Uber on TS 96 is appropriate.

In addition, Waymo's repeated reframing of the scope of TS 96 confirms that it is not properly identified. As explained in Uber's prior briefing, Waymo's description of the in the TS 96 files does not properly identify specific alleged trade secret information from the hundreds of components and parameters in those files. Furthermore, Waymo is not even asserting misappropriation of the specific parameters in the files, but focusing instead on a general diode positioning concept that Waymo argues is "reflected" in the TS 96 files. (9/6/17 Sealed Hr'g Tr. at 54:18-55:24.) Having defined TS 96 as a specific implementation of a specific board, Waymo should not be allowed now to backdoor a general

diode positioning concept that is not spelled out in TS 96 and is found only in other alleged trade secrets that Waymo has waived.

Finally, Dr. Hesselink's analysis for comparing Waymo's GBr3 and Uber's Fuji is methodologically unsound, and should be excluded under the Court's gatekeeping function.

II. ARGUMENT

1.

A. Summary Judgment Should Be Granted on TS 96

Uber does not use TS 96 as defined in Waymo's 2019.210 Statement



(Dkt. 25-7 at 55.) As the Court has noted, "Waymo insists that asserted trade secret number 96 was adequately disclosed because it remains 'directed to *specific implementations* of Waymo's trade secret LiDAR designs' as opposed to general concepts." (9/6/17 Order, Dkt. 1485 at 1 (quoting Waymo Opp'n, Dkt. 1160 at 6 (emphasis in original).) To escape Defendants' motion to strike, Waymo has repeatedly insisted that TS 96 is limited to a single schematic:

We disclosed a specific schematic. This one PCB. Okay? Out of 1 14,000 files, we narrowed it to this one schematic. (8/23/17 Public Hr'g Tr. at 24:11-12.) 2 3 TS 96 claims one specific PCB that includes Waymo's trade secret list (served before discovery began) identified this exact PCB 4 schematic, and identified for Defendants that one unique aspect of 5 the schematic reflected 6 as implemented by Waymo is identified in TS 96 for purposes of Section 2019. (Waymo Resp. to 7 Suppl. Br., Dkt. 1449-4 at 4 (emphasis added).) (See also 8/23/17 Sealed Hr'g Tr. at 47:8-10 8 As the Court observed during 9 inspection of the files in question, the layouts claimed by Waymo comprise "every single box, 10 circle, and line on that thing is the layout – selection and layout, and the required manufacturer." 11 (8/23/17 Public Hr'g Tr. 28:8-12.) But Waymo does not point to Uber's use of any specific 12 layout, diode position, angle, or any other specification from the GBr3 Instead, 13 Waymo's expert, Dr. Hesselink, says only that the laser diodes 14 (Chang Decl. Ex. 1, Hesselink Rpt. ¶ 432.) 15 Even according to Waymo's own expert, Uber did not use Waymo's specific 16 implementation for TS 96. As purported "objective evidence of the similarity" between Waymo 17 and Uber's designs, Dr. Hesselink plotted the laser diode positions for Waymo's GBr3 18 and Uber's Fuii on separate curves and overlaid them (after scaling) for comparison. 19 (Dkt. 1357-3 at 24.) Even assuming that Dr. Hesselink's method of scaling the Fuji curve was 20 methodologically sound (it is not), the laser diode positions do not match. (*Id.* (overlay below).) 21 22 23 24 25 26 27



Waymo cannot dispute that, when comparing the actual delta Y of the diodes, Fuji's diodes at the bottom of spaced farther apart than GBr3's, while its other diodes are spaced between farther apart than GBr3's, demonstrating that the Fuji board is not a scaled-up copy of the GBr3 board as Waymo had suggested. (Uber Suppl. Br., Dkt. 1399-4 at 4-5 (containing chart).)

Dr. Hesselink's second attempt in Waymo's September 5 submission, where he provided a new analysis that was not in his expert report (and therefore should not even be considered), fares no better. In an effort to make the diode positions appear similar, Dr. Hesselink adjusts the curves of the GBr3 and Fuji diodes to remove the effect of the different focal lengths (as explained below in Section B, this is an improper adjustment). Notwithstanding Dr. Hesselink's adjustments, the illustration still clearly shows that the diode positions *do not match*. (*Id*. at 11.)

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1	As can be seen, the GBr3 and Fuji beam spacing patterns are very different in terms of fields of
2	view, elevation angles of the beams, density of the beam spacing, and interrogation points of the
3	beams on the roadway. Dr. Hesselink's own comparison shows that the GBr3 and Fuji designs
4	do not result in the same roadway interrogation points. (Id. at 16-17.)
5	, and only
6	(Id. at 14.) The undisputed differences in the beam spacing patterns necessarily mean that the
7	diode positioning will be different, as evidenced by the differences reflected in Dr. Hesselink's
8	analysis.
9	In addition, Uber has pointed out many other differences between the GBr3
10	Fuji that Waymo cannot dispute (e.g.,
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12	(Dkt. 1461-3 at 4.) Between Dr. Hesselink's admissions and these
13	unchallengeable differences, there can be no genuine dispute that Uber does not use Waymo's
14	GBr3 implementation.
15	2. Waymo should not be allowed to assert general diode positioning and beam spacing concepts through TS 96
16	beam spacing concepts through 15 90
17	Waymo should not be allowed to manufacture a dispute about TS 96 by alleging
18	misappropriation of Waymo's general diode positioning and beam spacing strategy, which is not
19	a trade secret that Waymo chose to assert. This attempted misdirection is clear in Waymo's Offer
20	of Proof, where Waymo contends that it spent years to figure out that "
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22	"which was "reflected" in GBr3. (Offer of Proof, Dkt.
23	1357-3 at 18.) Recognizing that Dr. Hesselink's own overlay of "scaled" GBr3 and Fuji curves
24	indisputably show that the actual diode positions do not match, Waymo now argues instead that
25	"[t]his overlay shows a strikingly similar positioning of the individual diodes as well as the
26	same provided by Anthony
27	Levandowski to Uber/Otto." (Id. at 24-25 (emphasis added).) In a transparent attempt to shift
28	the Court's attention back to their "gigantic conspiracy" about Anthony Levandowski, Waymo

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should not be allowed to assert general diode positioning or beam spacing concepts not disclosed in TS 96.

B. TS 96 Should Be Stricken

1. TS 96 is not a properly identified trade secret

Waymo's position that TS 96 covers "Waymo's " or strategy confirms that TS 96 is not properly delineated. Waymo has contended that "TS 96 claims one specific PCB board that includes "." (Waymo Resp. to Suppl. Br., Dkt. 1449-4 at 4.) But for its misappropriation theory, Waymo is focusing on its general beam spacing design, arguing that "its design included in TS 96 is unique and different from Uber's prior designs and those known in the industry" and "the strategy embodied in TS 96" includes (Id. at 5.) At the September 6 hearing, Waymo admitted to the Court that the " " is a different trade secret that is not being asserted at trial. (9/6/17 Sealed Hr'g Tr. at 49:10-50:16.).

Trade secret plaintiffs must "describe the subject matter of the trade secret with *sufficient particularity* to separate it from matters of general knowledge in the trade or of special knowledge of those persons . . . skilled in the trade." *Imax Corp. v. Cinema Techs., Inc.*, 152 F.3d 1161, 1164-1165 (9th Cir. 1998) (citation omitted; emphasis in original); *see also Princess Cruises, Inc. v. Amrigon Enters., Inc.*, 51 F. App'x. 626, 628 (9th Cir. 2002) (granting summary judgment on trade secret counterclaim where plaintiff's "generalizations concerning its database components are insufficient to establish the necessary distinctions between its work and general knowledge in the trade.") Here, Waymo's Section 2019.210 statement for TS 96 contains no identification of a strategy. Waymo argues that its identification of design." (Waymo Resp. to Suppl. Br., Dkt. 1449-4 at 4.) But in *Imax*, the Ninth Circuit rejected the plaintiff's "use of the catchall phrase 'including every dimension and tolerance that defines or reflects that design'" as insufficiently specific. *Imax*, 152 F.3d at 1167. For TS 96, Waymo likewise improperly uses

1	catchall language. (See Dkt. 27-5 at 55 ("For example, these details include unique and unknown
2	design characteristics such as the").) If TS
3	96 can be interpreted to mean both "and a general" and a general
4	," it should be stricken for failure to identify the trade secret with
5	sufficient particularity.
6	Moreover, as Uber has explained in its prior submissions, even limited to the specific
7	parameters defined in the TS 96 files, TS 96 is still not a properly identified trade secret because
8	it contains too many components and values without indicating which are purportedly trade
9	secrets. TS 96 claims
10	(Dkt. 25-7 at 55.) As the Court saw at the
11	inspection, there are ten files in this specific folder with information for each of four layers of the
12	board, including layouts of hundreds of components, the required manufacturer, and
13	manufacturing tolerances. (8/23/17 Public Hr'g Tr. at 4:23-5:4, 18:6-17, 28:8-12, 30:13-23.) The
14	schematics include the laser diode firing circuit that is claimed in Waymo's asserted '936 patent,
15	which clearly cannot be a trade secret. (Id. at 25:17-26:22.) Waymo's own Rule 30(b)(6) witness
16	on TS 96 testified that the files cover a "very long" list of things that have nothing to do with
17	diode positions (Chang Decl. Ex. 2, 8/3/17 Droz 30(b)(6) Dep. 288:19-290:22), and which
18	Waymo does not allege that Uber copied.
19	Instead of identifying any specific features in the "very long" list of components and
20	values that are included in the schematics, Waymo's Section 2019.210 Statement expressly uses
21	vague and non-limiting language to claim unspecified "unique and unknown design
22	characteristics." (Dkt. 25-7 at 55 ("For example, these details include unique and unknown
23	design characteristics such as the
24	is not "enough detail so that the defendant is able to learn the boundaries of the alleged trade
25	secret in order to investigate defenses." VasoNova Inc. v. Grunwald, No. C 12-02422 WHA,
26	2012 WL 4119970, at *2 (N.D. Cal. Sept. 18, 2012). As drawn in Waymo's Section 2019.210
27	Statement, TS 96 should be stricken for vagueness.
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2. The sufficiency of Waymo's TS 96 identification is a question for the Court, not the jury

Waymo's argument that disputes over the identification of TS 96 are solely questions of fact for the jury ignores decisions to the contrary. (See, e.g., Waymo Resp. to Suppl. Br., Dkt. 1449-4 at 5-6, 8-9.) In Agency Solutions, the district judge explained that "a particularized description of an alleged trade secret is a duty owed to the court" such that the court can "reject a claim that information is a trade secret *sua sponte* if the information is not identified . . . with sufficient particularity to allow the court to determine what the information is." Agency Solutions. Com, LLC v. Trizetto Grp., Inc., 819 F. Supp. 2d 1001, 1017 (E.D. Cal. 2011). In Fortinet, even after defendant "accepted [plaintiff's] trade secret disclosure for discovery purposes," the "primary question for the Court [was] whether the trade secret disclosure is sufficiently specific such that [defendant] can adequately defend itself." Fortinet, Inc. v. Sophos, Inc., No. 13-cv-05831-EMC, 2015 WL 5971585, at *2 (N.D. Cal. Oct. 15, 2015). The Fortinet court conducted this assessment after the close of discovery, but three months before trial. *Id.* at *2-3; see Case Management & Pretrial Order for Jury, Fortinet, Inc. v. Sophos, Inc., No. C 13-5831 EMC, (N.D. Cal. Dec. 16, 2014), Dkt. 110. Waymo's September 1 response relies on Lilith Games, but that case confirms that Section 2019.210 is not only about constraining discovery; rather, Section 2019.210 "enables defendants to form complete and well-reasoned defenses, ensuring that they need not wait until the eve of trial to effectively defend against charges of trade secret misappropriation." Lilith Games (Shanghai) Co. v. uCool, Inc., No. 15-CV-01267-SC, 2015 WL 4149066, at *4 (N.D. Cal. July 9, 2015).

Under the weight of the authority, whether Waymo identified TS 96 with sufficient particularity is a question for the Court. On the facts here, where Waymo is trying to shoehorn all manner of supposed trade secrets into the rubric of a specific folder of files, it is especially important that the Court exercise its authority and strike the claimed trade secret.

C. Dr. Hesselink's Opinion on TS 96 Should Be Excluded

Dr. Hesselink's opinion on TS 96 should be excluded under the Court's gate-keeping function, in order to avoid mischief and confusion of the jury. First, he disregards alternative

1	explanations for similarities between the two boards—i.e., that two different beam spacing
2	patterns designed to illuminate points farther and farther down a road will have laser diodes
3	positioned together. Second, his comparison of the GBr3 and Fuji curves is
4	methodologically unsound. "[A]ny step that renders [an expert's] analysis unreliable renders
5	the expert's testimony inadmissible. That is true whether the step completely changes a reliable
6	methodology or merely misapplies that methodology." Metabyte, Inc. v. Canal+Techs., S.A., No.
7	C-02-05509 RMW, 2005 WL 6032845, at *2 (N.D. Cal. June 17, 2005) (granting motion to
8	exclude testimony because expert's "direct ratio" analysis for valuing equity was flawed and
9	lacked external support). Waymo cannot meet its burden of demonstrating the admissibility of
10	Dr. Hesselink's TS 96 opinion, and any probative value of this opinion is outweighed by the
11	danger of unfair prejudice and misleading the jury. ¹
12	 Dr. Hesselink disregards the possibility that any similarity between GBr3 and Fuji arises from general principles of optics
13	GB13 and rujt arises from general principles of optics
14	Even if one were to accept Dr. Hesselink's analysis that GBr3 and Fuji boards appear
15	similar because the
16	Dr. Hesselink disregards an alternative explanation for this alleged similarity –
17	namely, that any beam spacing pattern designed to maintain an adequate vertical resolution in the
18	far field vs. the near field will have beams (and therefore diodes) spaced more
19	the far field than the near field.
20	Dr. Hesselink agrees with Uber that the relationship between the beam angle and a point
21	on a flat road is a simple trigonometric function:
22	Tangent(beam angle from horizontal) = sensor height / downrange distance.
23	distance.
24	¹ Dr. Hesselink also fails to apply the Section 2019.210 statement's definition of TS 96 as
25	the specific implementation in the cited files. (Dkt. 25-7 at 55.) In his report, he does not cite evidence showing that Uber used the actual GBr3 transmi
26	the folder. He does not cite any evidence that Uber ever possessed these files or that any engineers at Uber made use of them to design Fuji. Furthermore, he admits that the laser diode
27	positions and angles are "different reflecting a number of difference in design choices" (e.g., height of LiDAR from ground, desired vertical resolution, downward tilt angle of cavity, and lens
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parameters). (Chang Decl. Ex. 1, Hesselink Rpt. ¶ 433.)

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1	(See Uber Resp. to Court Questions, Dkt 337-3 at 2; Hesselink Decl., Dkt. 1456-3 at 30.) As a
2	matter of trigonometry, the beam angles required for illuminating evenly-spaced points on a road
3	farther and farther from the lens will progressively become spaced. (See Uber Resp.
4	to Court Questions, Dkt 337-3 at 2-3.) Likewise, the vertical spacing of the corresponding diodes
5	for sampling points in the far field would become
6	Court has referred to this as Optics 101. (5/11/17 PI Order, Dkt. 426 at 17.)
7	Gbr3 and Fuji have different beam spacing designs (i.e., different elevation angles,
8	different VFOVs), but they are both designed to have
9	beams aimed more towards the horizon) than for the near field (laser beams aimed more
10	downward). While they are not designed to have beams landing at evenly-spaced points on the
11	ground, the landing points will be in the near field than in the far field, due to the
12	trigonometry described above. This is also true for the pioneering Velodyne HDL-64, which has
13	for the far field than the near field. The illustration on the left below
14	depicts the HDL-64 beam spacing (in blue). As can be seen, the manner in which the beams
15	interrogate the ground is similar to the GBr3 pattern (on the right in red), with beams hitting
16	in the near field and farther apart in the far field. As can be seen in the
17	illustrations of the Fuji pattern earlier in this brief, Fuji also has that general ground pattern.
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25	Dr. Hesselink failed to consider whether any similarity in the
26	spacing of diodes between GBr3 and Fuji simply reflects the similar goals of maintaining
27	adequate vertical resolution in the far field embraced by Velodyne, Waymo, and Uber, which

results in some general similarities in the beam patterns of all three LiDARs in accordance with

the general principles of optics. Although Dr. Hesselink purports to justify his conclusion that

Fuji is derived from GBr3 based on such spacing, he

disregards this alternative explanation. This unsupported opinion should therefore be excluded.

2. Dr. Hesselink's comparison of the GBr3 curve and the Fuji curve, rather than actual diode positions, is methodologically unsound

Dr. Hesselink's comparison of the GBr3 curve and the Fuji curve, rather than the actual diode positions (which do not match), is methodologically unsound and should be kept away from the jury. As the Ninth Circuit has noted, courts must exercise their *Daubert* gatekeeper function because "[e]xpert evidence can be both powerful and quite misleading because of the difficulty in evaluating it." *U.S. v. Rincon*, 28 F.3d 921, 925 (9th Cir. 1994). Here, Dr. Hesselink intends to rely on the overlay of a scaled Fuji curve and a GBr3 curve to opine that the "shape of the two curves are strikingly similar," notwithstanding the different positions of the diodes even in the scaled overlay. (Dkt. 1357-3 at 24.)

but Dr. Hesselink ignores the actual diode positions in the schematics in favor of

This is a bogus comparison. TS 96 claims the specific '

approximations of the Petzval curves of each transmit lens. Dr. Hesselink admits that the Petzval curve is defined by the focal length, refractive index (based on lens material), and lens shape of each lens. (Hesselink Decl. ¶ 12.) In both GBr3 and Fuji,

(Chang Decl. Ex. 1, Hesselink Rpt. ¶ 387; Hesselink Decl. ¶ 14-15.) The difference in focal length necessarily means that the Petzval curvatures are different, which is one reason why the positioning of diodes are different (the other reason is that the beam angles to which the diode positioning corresponds are different). Dr. Hesselink's analysis removes this difference by factoring out the focal length, ostensibly to compare the curves to see if one is a scaled version of the other. By comparing the curves with the focal lengths factored out, Dr. Hesselink is merely showing that Petzval curves of the same focal length will be the same. This artificial comparison of *curves* does not establish that the *diode positioning* is the

same. It is undisputed that the laser diodes do not match even in these scaled curves.

of GBr3

For these reasons, Dr. Hesselink's overlay of scaled *curves*, rather than just diode positions, has no probative value. Allowing Dr. Hesselink to present his overlay of the curves would only mislead the jury into thinking the *curves* were copied from TS 96's claimed schematics, when it is the actual diode positions that are in dispute. Dr. Hesselink's comparison of the curves should be excluded from presentation to the jury.

III. CONCLUSION

Waymo can try to have it one way: assert a broadly-claimed trade secret that is harder to defend as a trade secret but for which it may be easier to show Uber's use. And it can try to have it the other way: assert a narrowly-drawn trade secret – such as to an exact specification – that may be easier to defend as a trade secret but for which it would be harder to show actual use. But Waymo can't have it both ways – assert that an exact specification constitutes its trade secret for purposes of defending its trade-secret status, yet claim that it can prove use of that trade secret merely if general concepts reflected in that specifications are utilized.

Having it both ways, however, is precisely what Waymo is attempting here. This Court expressed doubts about the validity of Waymo's original, broadly-worded trade secret, TS 1. Waymo thus retreated to TS 96 and claimed that the exact diode placement in the TS 96 specification constituted its trade secret. Yet Waymo cannot maintain, with any credibility, that Uber utilizes the same diode placement as in TS 96. So now Waymo claims that Uber's diode placement generally reflects the concepts of its trade secret – which is the broad idea of TS 1 from which Waymo fled. So long as this Court does not permit Waymo to assert two inconsistent trade secrets (one broad and one specific) at the same time, then the summary judgment issue here is easy. TS 96 claims a specific diode placement. Indisputably, Uber does not use that specific diode placement. Summary judgment must follow.

Furthermore, TS 96 is an improperly identified trade secret that should be stricken, and the Court should exercise its gatekeeper role to exclude Dr. Hesselink's opinions on TS 96.